

AMENDMENTS TO THE CLAIMS

What is claimed is:

Claim 1 (Previously presented) A manufacturing method of splittable microfiber substrate, which comprises:

(a) extruding polymer chip containing high crystallization degree polymer (A) and low crystallization degree polyester (B) in the weight ratio of 5/95~95/5 used for conjugated melting to spin into filament, when the cross section of the orientation of the diameter of the filament is taken, by using the layout of spinnerette to spin the filament which having high crystallization degree polymer (A) surrounded by low crystallization degree polyester(B); the said high crystallization degree polymer (A) region is distributed so that the main segment of the configuration which has two or more branching sections were formed in the fiber center section, and which collected and were extended from the section to the radial toward the fiber front face may be formed ; the said low crystallization degree polyester (B) is distributed in the thin film shape so that it can surround the aforementioned high crystallization degree polymer (A) which extended from the section to the radial toward the fiber front face ; the ratio of the thickness of the thin film to the diameter Y of microfiber which have not spunlaced and split is taken as Z in percentage, indicated in term of the diameter Y of microfiber which have not spunlaced and split and the diameter X of microfiber which have spun-laced and split as the relation:

$$Z=(1-X/Y)/2 \times 100\%, 0.1\% \leq Z \leq 5.0\% ;$$

(b) drawing the said unspunlaced and unsplit microfiber filament to form an unsplit microfiber staple, succeeded by opening, carding, lapping and water-jet punching treatment, knitting to form spunlace web, then treating by hot water, hot air to shrink to densification and get a microfiber substrate of improved carding ability.

Claim 2 (Previously presented) The manufacturing method according to claim 1, wherein said high crystallization degree polymer (A) can be one or more than one selected from the group consisting of Nylon 6, Nylon 66, polyethylene terephthalate (PET), polypropylene terephthalate (PPT), polybutylene terephthalate (PBT), polypropylene (PP) and thermoplastic polyurethane (TPU) of crystallization degree over 25% .

Claim 3 (Currently amended) The manufacturing method according to claim 1, wherein said low crystallization degree polyester (B) can be one or more than one ~~selected from the group consisting of~~ polyester (B) having low crystallization degree below 25% which can be obtained from the esterification product of one ~~and~~ or more than one glycolic acid selected from the group consisting of oxalic acid, succinic acid, o-phthalic acid, m-phthalic acid, p-hydroxybenzoic acid, p-hydroxy ethyl benzoic acid, and sodium m-phthalic acid sulfonate and one ~~and~~ or more than one glycol selected from the group consisting of 1,3-propylene glycol, 1,4-butylene glycol, diethylene glycol, polyethylene glycol, cyclohexyl dimethanol and terephthalyl alcohol.

Claim 4 (Previously presented) The manufacturing method according to claim 1, wherein said unspunlaced and unsplit microfiber filament will be divided into 4~108 segments while it is subjected to water-jet punching treatment to get microfiber of fineness 0.001-0.8 denier.

Claim 5 (Previously presented) The manufacturing method according to claim 1, wherein the water pressure of the said water-jet punching treatment is in the range of 10-600 bar.

Claim 6 (Previously presented) The manufacturing method according to claim 1, wherein the temperature of the said hot water is in the range of 50-98°C.

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Claim 7 (Previously presented) The manufacturing method according to claim 1, wherein the temperature of the said hot air is in the range of 100-200°C.

Claim 8 (Cancelled)